



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/081,433	02/22/2002	Herman Herman	TELE 49075	9987

7590 12/06/2004

Benjamin T. Queen, II
Pietragallo, Bosick & Gordon
One Oxford Center, 38th Floor
301 Grant Street
Pittsburgh, PA 15219

EXAMINER

HUNG, YUBIN

ART UNIT PAPER NUMBER

2625

DATE MAILED: 12/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/081,433	Applicant(s) HERMAN, HERMAN	
	Examiner Yubin Hung	Art Unit 2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-33 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 Feb 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>8/5/02</u> . | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Drawings

1. The drawings are objected to because handwritten labels and reference numerals are used. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

2. The disclosure is objected to because of the following informalities:
- P. 5, lines 1-2 and P. 6, line 7: Application serial numbers and filing dates are missing

Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1, 4, 5, 7-9, 11, 13, 15, 16, 18, 19, 21, 22, 24, 26, 28, 29, 31 and 32 are rejected under 35 U.S.C. 102(e) as being anticipated by Driscoll, Jr. et al. (US 6,043,837).

5. Regarding claim 1, and similarly claims 11 and 18, Driscoll discloses

- transmitting a raw photographic image to the server computer
[Fig. 4: refs. 400, 402, 405; Col. 3, lines 19-27. Note that each annular image from the camera is a raw photographic image]
- processing the raw photographic image on the server computer to obtain the panoramic image
[Fig. 4, : ref. 400, 430, 447; Col. 2, lines 62-64; Col. 3, lines 35-47. Note that the unwrapped, rectangular image produced by 447 is a panoramic image]

6. Regarding claim 4, Driscoll further discloses

- wherein the transmitting is from a camera to the server computer

[Fig. 4: refs. 400, 402, 405]

7. Regarding claim 5, and similarly claims 13, 19, 26 and 32, Driscoll further discloses

- wherein the processing of the raw photographic image on the server computer includes unwarping the raw photographic image utilizing unwarping software installed on the server computer
[Fig. 4,: ref. 400, 430, 447; Col. 2, lines 62-64; Col. 3, lines 35-47]

8. Regarding claim 7, and similarly claims 15, 21 and 28, Driscoll further discloses

- transmitting the panoramic image from the server computer to the client computer
[Figs. 4, 7, 8]

9. Regarding claim 8, Driscoll further discloses

- viewing the panoramic image on the client computer
[Figs. 7, 8]

10. Regarding claim 9, and similarly claims 16, 22 and 29, Driscoll further discloses

- transmitting the panoramic image to an additional computer for viewing
[Fig. 4: refs. 495, 497]

11. Regarding claim 24, Driscoll further discloses

- a client-server computer network, a system for generating a panoramic image
[FIG. 4]
- a processor
[Fig. 4. Note that the existence of a processor is inherent in a system]
- a memory device having data and instructions stored thereon which, when executed by said processor, cause said processor to perform the steps of
[Fig. 4. Note that the existence of a memory device is inherent in a system]

Art Unit: 2625

- transmitting a raw photographic image to the server computer and processing the raw photographic image on the server computer to obtain the panoramic image
[Per the analysis of claim 1]

12. Regarding claim 31, Driscoll further discloses

- a client-server system for generating a panoramic image, wherein the server is configured to receive requests from the client, send responses to the client
[Fig. 4: refs. 400, 490, 495, 497; Col. 4, lines 41-50]

and wherein the server is further configured to:

- receive a raw photographic image from the server computer
[Fig. 4, refs. 430, 447]
- process the raw photographic image on the server computer to obtain the panoramic image
[Fig. 4, ref. 400, 430, 447; Col. 2, lines 62-64; Col. 3, lines 35-47. Note that the unwrapped, rectangular image produced by 447 is a panoramic image]

Claim Rejections - 35 USC § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claims 2, 3, 12 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Driscoll, Jr. et al. (US 6,043,837) as applied to claims 1, 4, 5, 7-9, 11, 13, 15, 16, 18, 19, 21, 22, 24, 26, 28, 29, 31 and 32 above, and further in view of Haeberli (US 6,587,596).

Art Unit: 2625

15. Regarding claim 2, and similarly claims 12 and 25, Driscoll discloses all limitations of its parent, claim 1.

Driscoll does not disclose expressly

- importing the raw photographic image from a camera to the client computer

However, Haeberli teaches/discloses importing images from a camera to a client computer. [See Fig. 1: refs. 104, 108, 110; Col. 7, lines 48-55.] (Note that Driscoll teaches/suggests capturing raw photographic images which are subsequently processed to obtain panoramic images. See Fig. 5, refs. 405, 447.]

Driscoll and Haeberli are combinable because both have aspects that are from the same field of endeavor of image distribution.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to modify Driscoll with the teachings of Haeberli by importing images from a camera to a client computer. The motivation would have been to reduce cost by having only the server equipped with the necessary hardware and software to perform the computation-extensive jobs such as generating panoramic images, as is commonly practiced in the art.

Art Unit: 2625

Therefore, it would have been obvious to combine Haeberli with Driscoll to obtain the invention of claim 2.

16. Regarding claim 3, Haeberli further discloses

- the transmitting is from the client computer to the server computer [Fig. 1, refs. 100, 106, 102]

17. Claims 6, 14, 20, 27 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Driscoll, Jr. et al. (US 6,043,837) as applied to claims 1, 4, 5, 7-9, 11, 13, 15, 16, 18, 19, 21, 22, 24, 26, 28, 29, 31 and 32 above, and further in view of Horie (US 6,735,341).

18. Regarding claim 6, and similarly claims 14, 20, 27 and 33, Driscoll discloses all limitations of its parent, claim 1.

Driscoll does not disclose expressly

- adjusting the raw photographic image to orient and correct the exposure and white balance of the raw photographic image prior to obtaining the panoramic image

However, Horie teaches/suggests preprocessing images to correct rotational shift (i.e., to orient), the exposure and the white balance. [Fig. 5: ref. S3; Col. 6, lines 15-19; Col. 8, lines 29-30.]

Driscoll and Horie are combinable because both are from the same field of endeavor of image processing.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to modify Driscoll with the teachings of Horie by preprocessing images to correct rotational shift (i.e., to orient), the exposure and the white balance. The motivation would have been to improve the image quality as well as to low for optimum compression [Horie: Col. 8, lines 11-13]..

Therefore, it would have been obvious to combine Horie with Driscoll to obtain the invention of claim 6.

19. Claims 10, 17, 23 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Driscoll, Jr. et al. (US 6,043,837) as applied to claims 1, 4, 5, 7-9,11, 13, 15, 16, 18, 19, 21, 22, 24, 26, 28, 29, 31 and 32 above, and further in view of Guedalia (US 6,121,970).

Regarding claim 10, and similarly claims 17, 23 and 30, Driscoll discloses all limitations of its parent, claim 1.

Driscoll does not disclose expressly

- embedding the panoramic image in a web page for viewing on a specified computer network

However, Guedalia teaches/discloses embedding images in an HTML page for viewing over the Internet. [See Fig. 1; Col. 2, lines 41-44; Col. 12, lines 21-58.]

Guedalia and Driscoll are combinable because both have aspects that are from the same field of endeavor of image distribution.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to modify Driscoll with the teachings of Guedalia by embedding panoramic images in a web page. The motivation would have been to make the service available to the large potential customers who are connected to the Internet using the prevalent protocol (the HTML).

Therefore, it would have been obvious to combine Guedalia with Driscoll to obtain the invention of claim 10.

Contact Information

20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yubin Hung whose telephone number is (703) 305-1896. The examiner can normally be reached on 7:30 - 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bhavesh Mehta can be reached on (703) 308-5246. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Yubin Hung
Patent Examiner
December 1, 2004



**BHAVESH M. MEHTA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600**